

云南冬青科新分类群

李 雅 茹

NEW TAXA OF AQUIFOLIACEAE FROM YUNNAN

Li Ya-ru

单序冬青组 (Sect. *Lioprinus* (Loes.) S. Y. Hu 常绿乔木或灌木; 单个花序生于当年生枝叶腋或鳞片内。

叶片薄革质或坚纸质, 分核背部具1单沟, 断面呈U形 (聚伞冬青系 Ser. *Chinenses*)。

红河冬青

Ilex mannei S. Y. Hu

光叶红河冬青 (新变种) 图版8, 2

var. *glabra* C. Y. Wu, var. nov.

A var. *mannei* foliis omnino glabris differt.

本变种与原变种的主要区别在于叶全部无毛。

Yunnan (云南): Luquan (禄劝), Shandexiang (善德乡), alt. 3200m in sylvis, arbor 8m alta, fructus ruber, Nov. 28, 1952, P. I. Mao (毛品一) 1887; Jingdong (景东), Wunbexiang (温卜乡), alt. 2700m in montibus, arbor 20m alta, fructus viridis, Oct. 7, 1956, P. Y. Chiu (邱炳云) 52744 (Typus! 模式标本! KUN*),

本文作者工作单位: 云南、昆明, 中国科学院昆明植物研究所 (Kunming Institute of Botany, Academia Sinica, Kunming, Yunnan).

* 中国科学院昆明植物研究所标本室。

Lufeng (禄丰), Juewoping (角窝坪), alt. 2700m in sylvis, fructus 1—2m altus, fructus ruber, Oct. 23, 1964, P. Y. Chiu 596342.

楠叶冬青 (新种) 图版 1, 1

Ilex machilifolia H. W. Li, sp. nov.

Species affinis *I. editicostatae* Hu et Tang, sed foliis majoribus tenuibusque, nervis lateralibus pluribus conspicuis, costis pilis ornatis differt.

Arbor, 10—20m alta, ramulis grossis, fulvis, angulosis, foliolicatricosis semiorbiculatis elevatis, gemmis ovatis, perulis crassis ciliatisque, Folia in hornotinis ramulis inserta, lamina crasse chartacea vel tenuiter coriacea, oblongo-elliptica raro oblonga vel elliptica, 10—16cm longa, 4—6cm lata, apice acuminata, basi late cuneata vel cuneata, costa supra prominenti puberula, subtus perelevata, glabra, nervis lateralibus 15—18-jugis, utrinque conspicuis, ad marginem reticulatis, subtus glabris, interdum supra minutis puberulis, reticulatis utrinque conspicuissimis, petioli 1.5—2cm longi, grossi, supra plani vel leviter sulcati, Puberuli in sulcatis. Flores ignoti. Infructescentia cymosa, axe 5—9mm longo, percompressa, striato, glabro, pedicellis ca. 10mm longis, striatis glabris, fructus globosi ca. 1cm diam., rubri. calyce persistenti disciformi prostrati 4—6 lobato, lobis orbiculatis, margine membranaceis ciliatis, stigma disciformis, leviter 5—6-lobatum, pyrenis 5, ad dorsum 1-sulcatis, in sectione transversali U-formibus.

Yunnan (云南): Malipo (麻栗坡), alt. 1800—2000m in sylvis mixtis, arbor 20m alta, fructus ruber, Dec. 12, 1947, K. M. Feng (冯国楣) 13797 (Typus! 模式标本! fr. KUN); Guangnan (广南) alt. 1700m in sylvis sempervirentibus frondosis, arbor 20m alta, fructus ruber, Q. A. Wu (武全安) 9721, ibidem (同地) alt. 1700m in sylvis montibus, arbor 20m alta, fructus ruber, Nov. 5, 1964, Z. W. Lin (林中文) 602.

本种与 *I. editicostata* Hu et Tang 相似, 但叶较大而薄, 侧脉多而明显, 中脉被毛而不同。

假楠叶冬青 (新种) 图版 1, 2

Ilex pseudomachilifolia C. Y. Wu, sp. nov.

Species affinis *I. machilifoliae* H. W. Li, sed planta glabra, ramulis purpureo-nigris plicatis rugosis, foliis majoribus tenuibusque, costa supra impressa, nervis lateralibus venulisque conspicuis, inflorescentiis cymosis differt.

Arbor, 10m alta, omnino glabra; ramulis purpureo-nigris, hornotinis plicatis rugosis nitidis, in annotinis foliociatricosis semiorbiculatis conspicuis, lenticella minia; gemmis conicis, apicibus acumenibus, glabris. Folia chartacea elliptica vel ovato-elliptica 15—18cm longa, 5—7cm lata, apice acuminata, basi lato-cuneata vel obtusa, margine parce undulata leviter serrata, costa supra impressa, subtus elevata, nervis lateralibus 18—20-jugis, utrinque prominentibus, petioli 1.8—2cm longi, supra sulcati, subtus teretes striati. Flores ignoti. Infructescencia composite cymosa axillaris, axe 7—12mm longo, compresso, pedicelli 3—7mm longi. Fructus juventute ovato-globosi, calyce persistente leviter 5—6-lobato, lobis ciliatis, stigma capitatum.

Yunnan (云南); Pingbian (屏边) alt. 1500m in sylvis, arbor 10m alta, Jul. 17, 1934, H. T. Tsai (蔡希陶) 62732 (Typus! 模式标本! KUN).

本种近似楠叶冬青 (*I. machilifolia* H. W. Li), 但植物体无毛, 分枝紫黑色, 具褶的棱沟, 叶较大而薄, 中脉在上面下陷, 侧脉和小脉显著, 花序聚伞形而不同。

柞叶冬青 (新种) 图版 1, 3

Ilex xylosmaefolia C. Y. Wu, sp. nov.

Species affinis *I. ferrugineae* Hand.-Mazz., sed ramulis breviter luteo-tomentosis appressis, foliis elliptico-lanceolatis vel oblongo-ellipticis, apice acuminatis differt.

Arbor parva, 4—6m alta; ramulis cinereis, hornotinis gracilibus, dense breviterque luteo-tomentosis, biennibus et trimis parce pilosis, angulatis sulcatisque, lenticellatis. Folia in hornotinis ramulis raro biennibus inseta, laminis chartaceis, elli-

ptico-lanceolatis vel oblongo-ellipticis, 7—9cm longis 2—3.2cm latis, apice, acuminatis vel longe acuminatis, basi orbiculatis, margine parce crenato-serratis, costa supra plana vel paulo impressa, breviter luteo-tomentosa, subtus elevata, ad basem tantum pilosa, nervis lateralibus 8—9-jugis, utrinque prominentibus, reticulatis paulo prominentibus, petioli 3—5mm longi supra canaliculati, subtus teretes, dense breviter luteo-puberuli. Cymae ad hornotinas ramulos insertae, pedunculi pedicellique breviter luteo-tomentosi. Flores masculi, parvi (immaturi) 4-meri, calyce partito, lobis triangulatis, extus breviter luteo-tomentosis, ciliatis, petala oblonga, stamina petalis subaequantia vel iis breviora, antherae majores, oblongae, sterilia ovaria globosa, stigmate lobato. Flores feminei, 4-meri, calyce et petalo cum flore masculo, anantheri petalis breviores, antherae sagittatae, ovaria globosa. Fructus ignoti.

Yunnan (云南): Funing (富宁), alt. 1000m in sylvis, alabastrum viridis, Maj. 5, 1940, C. W. Wang (王启无) 89171 (Typus! 模式标本! KUN).

本种与锈毛冬青 (*I. ferruginea* Hand.-Mazz.) 相近, 但小枝被黄色短绒毛, 叶长圆状披针形至长圆状椭圆形, 先端渐尖而不同。

密花冬青 (新种) 图版 1, 4

Ilex cougesta H. W. Li, sp. nov.

Species affinis *I. xylosmaefoliae* C. Y. Wu, sed foliis ellipticis 7—9cm longis, 4—5cm latis, margine sparsim serratis, supra in costa puberulis, pedicellis fructuum puberulis differt.

Arbor parva, 5m alta, hornotinis ramulis nigro-fuscis striatis, foliolicatricosis semiorbiculatis conspicuis, lenticellis ellipticis, conspicuis parce pubescentibus, annotinis fusco-cineis, striatis, gemmis ovatis, dense flavis pubescentibus. Folia in apice hornotini ramuli inserta, lamina subcoriacea elliptica 9—11cm longa, 4—5cm lata, apice acumina, basi suborbiculata, margine sparsim serrata, costa supra paulo impressa, puberula, subtus elevata glabra, nervis lateralibus 9—10-jugis, supra paulo impressis, subtus prominentibus, petioli grossi 6—

10mm longi, fusco-pubescenti, supra sulcati. Flores ignoti. Infructescentia cymosa, trifructu, hornotino ramo axillare, axe 5—6mm longo, compresso, puberulo, pedicelli ca. 5mm longi, puberuli. Fructu globoso rubro ca. 1cm diam., calyce persistente, leviter 6-lobato vel undulato ciliato, stigma tenuiter disciformis leviter 4-lobatum, pyrenis 4, ad dorsum late 1-sulcatis, in sectione transversale V-formibus.

Yunnan (云南): Longling (龙陵), Yunlongshan (云龙山), Fulongsi (伏龙寺), alt. 1510m in montibus sylvis, arbor 5m alta, fructus ruber, Nov. 28, 1958, C. Chen (陈介) 642 (Typus! 模式标本! KUN).

本种与柞叶冬青 (*I. xylosmaefolia* C. Y. Wu) 相近, 但叶片椭圆形, 长 7—9 厘米, 宽 4—5 厘米, 边缘具疏锯齿, 叶面中脉被微柔毛, 果梗被微柔毛而不同。

黑果冬青

Ilex atrata W. W. Smith

无毛黑果冬青 (新变种)

var. *glabra* C. Y. Wu, var. nov.

A var. *atratae* W. W. Smith, recedit foliis subtus costis omnino glabris.

Yunnan (云南): Longling (龙陵), alt. 2900m in sylvis, arbor, 15m alta, fructus viridis, Aug. 28, 1941, C. W. Wang (王启无) 90202 (Typus! 模式标本! KUN).

本变种与原变种的主要区别是叶背中脉全部无毛。

冬青

Ilex purpurea Hassk.

有毛冬青 (新变种) 图版 2, 1

var. *pubigera* C. Y. Wu, var. nov.

A var. *purpurea* Hassk., recedit gemmis petiolis costisque foliorum supra puberulis, infructescentiis puberulis, fructibus interdum singulatibus, globosis majoribus, foliis crassioribus.

Yunnan (云南): Wenshan (文山), Sanqu (三区), Sozuodi (所左底), alt. 2000m in sylvis, arbor 8m alta, fructus ruber, Sep. 30, 1958, H. T. Tsai (蔡希陶) 58—8360 (Typus! 模式标本! KUN).

与原变种的区别在于芽，叶柄及叶的中脉上面被微柔毛，果序被微柔毛，果有时单生，球形，稍大，叶片较厚。

矮冬青组 [Sect. *Paltoria* (Ruiz & Pavon) Maxim.]

灌木，高的可达5米，矮的成匍匐状。叶片革质或近革质，具锯齿或圆齿，稀全缘或近全缘，背面具腺点或无点。雄花序簇生于当年或二年生枝叶腋；雌花序通常单生，稀3花排成聚伞花序，生于当年生枝叶腋〔偶见三花冬青 (*I. triflora*) 中成簇生；〕花4数，稀5—6数；花瓣在基部连合；果直径6—9毫米，具薄的外果皮和中果皮，分核4（个别种为5—6），光滑，很少在背部具皱，但有棱而无沟，内果皮革质。

叶片具点，分核4，宽约4毫米，背部具棱，通常棱上具皱纹（点叶冬青系 *Ser. Stigmatophorae*）。

川冬青

Ilex szechwanensis Loes.

毛叶川冬青（新变种）

var. *mollissima* C. Y. Wu, var. nov.

Ilex szechwanensis S. Y. Hu, (1949), p. p.; quoad specim. Tsai 60062, 60276, 61434, 61660.

A var. *szechwanensis* Loes. recedit ramulis dense puberulis, foliis minoribus tenuioribusque, ovatis vel ovato-lanceolatis, 2—5cm longis, 1.5—2.5cm latis, apicibus acuminatis, supra costis dense puberulis, floribus fructibusque minoribus.

Yunnan (云南): Pingbian (屏边), alt. 1400m in sylvis, frutex 1.3m altus, Aug. 7, 1934, H. T. Tsai (蔡希陶) 61660 (Typus: 模式标本! KUN), 60276; ibidem (同地), alt. 1800m in sylvis fruteum, frutex 2m altus, fructus viridis, Nov. 28, 1953, P. I. Mao (毛品一) 03201; Jinping (金平), alt. 1650m, in sylvis semipervirentibus, arbor, fructus niger, Dec. 4, 1952, Lo (罗) 1335.

与原变种的区别在于分枝和叶面沿中脉密被微柔毛，叶片较小而薄；卵形或卵状披针形，长2—5厘米，宽1.5—2.2厘米，先端渐尖，花和果均较小。

异叶川冬青 (新变种)

var. heterophylla C. Y. Wu, var. nov.

A var. *szechwanensis* Loes. recedit foliis saepe minorissimis tenuibusque, ovatis vel ovato-ellipticis, saepe 2—3.5cm longis, 1—1.5cm latis, nonnunquam minoribus et majoribus mixtis, minoribus 0.6—1cm longis, 0.4—0.8cm latis, majoribus 4—5cm longis, 1.8—2.2cm latis, margine parce crenato-serratis, apice acuminatis.

Yunnan (云南): Pingbian (屏边), alt. 2100m in dense sylvis vallum, frutex, flores albi, Jun. 28, 1956, Yunnan Exp. (云南考察团), 3753; Maguan (马关), alt. 2510m in dense sylvis, frutex 1.5m altus, flores albi, Maj. 28, 1959, C. A. Wu (武全安), 8133, 8197 (Typus: 模式标本! KUN).

与原变种的区别在于叶通常较小而薄, 卵形至卵状椭圆形, 通常长 2—3.5 厘米, 宽 1—1.5 厘米, 有时大小混生, 小的长 0.6—1 厘米, 宽 0.4—0.8 厘米, 大的长 4—5 厘米, 宽 1.8—2.2 厘米, 边缘具疏圆锯齿, 先端渐尖。

鲁甸冬青 (新种) 图版 2, 2

Ilex ludianensis S. C. Huang, sp. nov.

Species affinis *I. yunnanensi* Franch., sed foliis majoribus 4—5cm longis, 1.8—2cm latis, nervis lateralibus prominentibus, supra puberulis, subtus dense tomentosis, pedunculis ramulisque dense tomentosis differt.

Frutex 1.5—3m altus, ramulis angulatis dense tomentosis, gemmis majoribus conicis 4—5mm longis, dense tomentosis. Folia coriacea, supra viridia puberula subtus flavo-virentia dense tomentosa, ovata vel ovato-elliptica, 4—5cm longa, 1.8—2.6cm lata, apice acuminata, basi rotundata raro lato-cuneata, margine parce serrata, costa supra plana vel paulo prominenti, subtus elevata, nervis lateralibus 7—8-jugis, supra planis, subtus prominentibus, reticulatis paulo conspicuis, petioli 3—5mm longi, supra anguste sulcati, subtus teretes dense tomentosi. Flores ignoti. Fructus singulares axillares, pedicelli 1—1.3cm longi, dense tomentosi, fructus globosi 7—8mm diam., rubri, calyce

persistente disciforme 5mm diam. 5-partito, lobis triangulatis, dense tomentosis, stigma disciformis, pyrenis 5, ellipticis ca. 5mm longis, 2.5—3mm latis, glabris.

Yunnan (云南): Ludian (鲁甸), Soshanqu (梭山区), alt. 1400m in fruticetis montibus, frutex 1.5—3m altus, fructus ruber, Nov. 4, 1964, N. E. Yunnan Exp. (滇东北队) 1505 (Typus! 模式标本! KUN).

本种与云南冬青 (*I. yunnanensis* Franch.) 相似, 但叶片较大, 长 4—5 厘米, 宽 1.8—2.6 厘米, 侧脉明显, 上面被微柔毛, 背面密被绒毛, 果梗和分枝密被绒毛而不同。

刺齿冬青组 (Sect. *Aquifolium* Gray.) 常绿乔木或灌木, 花序簇生于二年生或更老的枝条叶腋; 分核 4, 稀较少, 背部具棱和沟或具皱纹和纹孔, 内果皮石质或木质。

分核具不正齐的皱纹和纹孔, 果直径 8—12 毫米, 柱头脐状, 稀为盘形 (齿叶冬青系 Ser. *Denticulatae*)。

巨叶冬青 (新种) 图版 2, 3

Ilex perlata C. Chen et S. C. Huang, sp. nov.

Species character primarius foliis maximissimis (20—)30—36cm longis, (8—)9—13cm latis, subtus valde dense brevique tomentosis et parce pubescentibus, nervis lateralibus 15—20-jugis, utrinque prominentibus, calyce floris masculi cupiforme a congenero diverso.

Arbor sempervirens vel frutex, ramulis grossis, nigro-purpureis vel coffeatis, teretibus, foliis cicatricosis orbiculatis conspicuis, gemmis anguste conicis parce pubescentibus. Folia maximissima, coriacea, olivacea vel fulvo-olivacea, elliptica vel oblonga, (20—)30—36cm longa, (8—)9—13cm lata, apice acuminata vel falcato-acuminata, base obtusa vel late cuneata, margine refracta parce serrata, supra nitida glabraque, subtus densissima velutina et parce pubescentia, dense et parve glandulosa, costa supra anguste impressa, subtus elevata, nervis lateraribus 15—20-jugis ad angulum 60° costa, ad margines reticulatis, utrinque promi-

mentibus, venulis prominentibus; petioli 1.8—2.5cm longi, grossi glabri, in sicco coffeati vel nigro-purpurei, subquadanguli supra leviter sulcati, subtus rugosi. Cymoso-panicula vel fasciculo axillare, 1—3-flore in ramulo, axe et pedunculo puberulo. Bracteae et bracteolae minores ovato-triangulatae ciliatae. Flores purpureo-rubri, 4-meri, masculi, pedicelli 2—6cm longi, calyce cupulato 3mm diam. extus parce puberulo, leviter lobato, lobis orbiculatis ciliatis, petala imbricata in alabastro, obovato-oblonga 4mm longa, 2.5mm lata, ad basem fere omnino discreta, stamina longitudine $\frac{2}{3}$ petalis aequantia, anthera elliptica ca. 2mm longa, sterila ovaria conica 1—1.5mm longa, feminei, pedicelli crassiore puberuli 5—6mm longi, bracteola ad basem inserta, calyce 2.5mm longo 3mm lato, extus puberulo, leviter lobato, lobis rotundatis ciliatis, petala obovato-oblonga 5—5.5mm longa, 3mm lata, ad basem fere omnino discreta, stamina ananthera longitudine $\frac{1}{2}$ petalis aequantia, anthera sagittata, ovaria elliptico-globosa 3.5mm longa, 2.5mm lata, stigmata disciforma 4-lobata. Fructus subglobosi 9mm longi, 8mm diam. rugosi, calyce persistente pleno, stigmata tenuiter disciforma, pyrena 4, elliptica 6mm longa, ad dorsum rugosa et scrobiculata, paulo striata, lateralem scrobiculata.

Yunnan (云南): Hekou (河口), Univ. Yunnan (云南大学) 2510 (Typus! 模式标本! KUN); ibidem, K. H. Tsai (蔡光华) 601, 960, G. Y. Chao (赵冠英) 15, S. Tseang (江心) 8, W. S. Fang (范文缩) 84.

本种主要特征是叶片极大, 长 (20—)30—36 厘米, 宽 (8—)9—13 厘米, 背面被极密的毡毛和疏短柔毛, 侧脉 15—20 对, 两面明显, 雄花花萼呈杯形, 易与其他种区别。

毛果冬青 (新种) 图版 2, 4

Ilex trichocarpa H. W. Li, sp. nov.

Species affinis *I. kaushuae* S. Y. Hu ex Hainanis, sed foliis multo angusto-minoribus, basi cuneatis apice acuminatis, reticulatis obscuris, fructibus minoribus (10×8mm) differt.

Arbor parva 4m alta, ramulis viridi-fulvidis angulosis puberulis, gemmis conicis dense puberulis. Folia crasse coriacea,

obovato-oblonga vel oblongo-lanceolata 8—10cm longa 2—3 (—3.5)cm lata, apice acuminata, basi cuneata, margine parce serrata, costa supra plana vel conspicua parce puberula vel glabra, subtus elevatissima, nervis lateralibus 9—10-jugis utrinque conspicuis, reticulatis utrinque prominentibus, petioli 5—10mm longi, grossi, puberuli. Flores ignoti. Fructus ovato-globosi, 10mm longi, 8mm diam. dense puberuli, stigma disciformis, pyrenis 4. 6mm longis, eregularibus scrobiculatis.

Yunnan (云南): Xichou (西畴), Dadi (大堤), in margine fruticetis, Nov. 10, 1939, C. W. Wang (王启无) 81331 (Typus: 模式标本! KUN).

本种近似海南岛产的 *I. kaushue* S. Y. Hu, 但叶较狭小, 基部楔形, 先端渐尖, 两面网脉不显, 果稍小 (10×8mm) 而不同。

叶片厚革质, 革质, 稀坚纸质, 侧脉在上面不显或平, 不下陷, 果梗长2—4毫米 (波缘冬青系 Ser. *Repandae*)。

凤庆冬青 (新种) 图版3, 1

Ilex fengqingensis C. Y. Wu, sp. nov.

Species affinis *I. corallinae* Franch., sed ramulis dense puberulis, fructibus fasciculatis minoribus globosis, tetragonis, 4mm diam., stigmatibus crasse disciformibus, pedicellis fructuum 1—3mm longis puberulis, pyrenis palmatis striatis esulcatis, foliis minoribus oblongo-ellipticis, nervis subtus prominentibus differt.

Arbor 5—7m alta, ramulis brunneis, teretibus, hornotinis angulosis, dense puberulis, annotinis fere glabris striatis, lenticellis non prominentibus, gemmis parve conicis, dense puberulis. Folia coriacea, olivacea, supra paulo nitida vel utrinque impolita, oblongo-elliptica 3—6cm longa 1.3—2cm lata, apice obtusa vel breviter acuminata, basi late cuneata vel obtusa, margine undulata econspicua parce serrata, costa supra plana vel leviter impressa, puberula, subtus elevata paulo pilifera vel glabra, nervis lateralibus 6—7-jugis, utrinque conspicuis, reticul-

latis prominentibus, petioli 5—8mm longi dense puberuli, supra anguste canaliculati. Flores masculi, ignoti. Flore feminei, uniflores fasciculati, pedicelli 1—2mm longi puberuli, flore 4-mero, calyce partito, lobis rotundatis ciliatis, petala obovato-oblonga, puberula, 3mm longa, 2mm lata, sterila stamina longiora vel aequala petalis, anthera ovato-sagittata, ovaria globosa, apice convexa, pedicelli 1—3mm longi, puberuli. Fructus globosus 4-angulatus et leviter 4-sulcatus, 4mm diam. calyce persistente patento 4-lobato, lobis semirobundatis ciliatis, stigma crasse disciformis, leviter 4-lobatum, pyrenis ellipticis 2.5mm longis 2mm latis, ad dorsum palmatim striatis esulcatis, ad lateralem paulo striatis sulcatisque.

Yunnan (云南): Fengqing (凤庆), alt. 2700m in sylvis, Jul. 12, 1938, T. T. Yu (俞德浚) 16713 (Typus! 模式标本! KUN); Lincang (临沧), alt. 2800m in sylvis, Oct. 11, 1938, T. T. Yu 18017; Longling (龙陵), H. T. Tsai (蔡希陶) 57040.

本种与珊瑚冬青 (*I. corallina* Franch.) 相似, 但分枝被微柔毛; 果簇生, 较小, 球形, 4棱形, 具4浅沟, 直径4毫米, 果柄长1—3毫米, 被微柔毛, 柱头厚盘形; 分核具掌状棱, 无沟; 叶片较小, 长圆状椭圆形, 叶脉在背面显著而不同。

纸叶冬青 (新种) 图版 3, 2

Ilex chartacifolia C. Y. Wu, sp. nov.

Species affinis *I. chienianae* S. Y. Hu, sed ramulis puberulatis, foliis chartaceis vel tenuiter coriaceis, late ellipticis vel oblongis, margine leviter crenulato-serrulatis, stigmatibus minori tenuiter discoideo differt.

Arbor 10m alta, ramulis grossis, angulosis sulcatisque annuis puberulis, biennis lenticellatis foliociatrosisque, trienniis grossis 6—7cm diam. lenticellatis majoribus, gemma terminalis conica puberula, perula ad marginem serrulata ciliataque. Folia chartacea vel tenuiter coriacea, fulvo-olivacea, late elliptica vel oblonga, 8—10mm longa, (3—)3.5—5mm lata, apice abrupte acuminata, base cuneata, margine leviter crenulato-serrulata,

costa supra impressa puberula subtus elevata glabra, nervis lateralibus 7—8-jugis, prominulis, reticulatis subtus prominulis, petioli 1—1.5cm longi. Flores ignoti. Fructescentia pseudoracemosa in axillaribus biennotum ramulorum ornata, axe 10—12mm longo grossiore, puberulo, uniflore in ramulo inserto, pedicelli ca. 5mm longi puberuli, Fructus globosi 6mm diam. puberuli vel glabri, calyce persistente 4-partito, lobis late triangulatis puberulis ciliatisque, stigma tenuiter disciformis 4-lobatum, pyrenis 4, ellipticis 4.5mm longis 2.5mm latis ad dorsum lateralemque palmatis sulcatis striatisque.

Yunnan (云南): Yangbi (漾濞), Mubangzuzu (木板祖祖), in dense sylvis, arbor, 10m alta, fructus viridis Oct. 29, 1940, R. C. Ching (秦仁昌) 25348 (Typus! 模式标本! KUN).

本种近似蛾边冬青 (*I. chieniana* S. Y. Hu), 但分枝被微柔毛, 叶纸质至薄革质, 阔椭圆形至长圆形, 边缘具浅的细圆锯齿, 柱头小, 薄盘形而不同。

无毛纸叶冬青 (新变种) 图版 3, 3

var. *glabra* C. Y. Wu, var. nov.

A var. *chartacifolia* recedit ramulis glabris, gemmis terminatis glabris, petiolis et costis glabris.

Yunnan (云南): Gongshan (贡山), Yiqu (一区) Bingzhonglo Xiang (秉中洛乡), alt. 1900m in sylvis, arbor 25m alta, fructus ruber, Oct. 10, 1956, P. I. Mao (毛品一) 00549 (Typus! 模式标本! KUN).

与原变种的区别在于分枝无毛, 顶芽无毛, 叶柄及中脉无毛。

灰叶冬青

Ilex tephrophylla (Loes.) S. Y. Hu

无毛灰叶冬青 (新变种) 图版 3, 4

var. *glabra* C. Y. Wu, var. nov.

A var. *tephrophylla* (Loes.) S. Y. Hu recedit pedicellis florum masculorum 5mm longis glabris, foliis minoribus 7—9cm longis 2—2.5cm latis.

Yunnan (云南): Menghai (勐海), Manyuan (曼远), alt. 1300m in dumetis montium, frutex 2m altus, flos viridis, Feb. 24, 1957,

Yunnan Exped. (云南考察团) 5126 (Typus! 模式标本! KUN).

与原变种的区别是雄花花梗长达5毫米, 无毛; 叶较小, 长7—9厘米, 宽2—2.5厘米。

云中冬青 (新种) 图版4, 1

Ilex nubicola C. Y. Wu, sp. nov.

Species affinis *I. tephrophyllae* (Loes.) S. Y. Hu, sed ramulis et costis foliorum utrinque puberulis, margine leviter undulato-denticulatis; inflorescentiis masculis pseudo-paniculatis puberulis differt.

Arbor (?), ramuli fulvo-cinerei, grossi, angulosi sulcatique; gemma conica puberula, perula ciliata. Folia chartacea oblonga vel late lanceolata vel anguste elliptica, 7—9cm longa, 2—3.2cm lata, apice acuminata vel longo-acuminata, basi late cuneata, margine leviter undulato-dentata, costa supra impressa puberula, subtus elevata puberula vel glabrescens, nervis lateralibus 7—9-jugis, supra paulo conspicuis, subtus insigniter conspicuis; petioli 8—10mm longi supra puberuli in anguste sulcatis, subtus puberuli vel glabri. Flores masculi, cymose pseudo-paniculati, axe, 3—6mm longi puberuli vel glabri, 3—5-flores in ramulis ornati; pedunculi 1—2mm longi puberuli, pedicelli 2—3.5mm longi puberuli; calyce 4-partito, lobis semirotundatis parce ciliatis; petala 4, oblonga, 3mm longa 2mm lata, ad basem consociata; stamina 4, petalis breviora, anthera elliptica; sterila ovata ovato-globosa, apice obtusa, stigma disciformis 4-lobatum. Flores feminei et fructus ignoti.

Yunnan (云南): Jinping (金平), alt. 2500m in sylvis, Apr. 1958, P. Y. Chiou (邱炳云) 56984 (Typus! 模式标本! KUN).

本种近似灰叶冬青 [*I. tephrophylla* (Loes.) S. Y. Hu], 但分枝具浅波状齿; 雄花序为聚伞状假圆锥花序, 被微柔毛而不同。

毛枝冬青 (新种) 图版4, 2

Ilex dasyclada C. Y. Wu, sp. nov.

Species affinis *I. pingnanensi* S. Y. Hu ex Guangxi, sed ramulis puberulis, foliis minoribus chartaceis, glabris, nervis utrinque econspicuis differt.

Frutex, 1.8—2.5 m altus, ramulis ochraceis, gracilibus, angulosis sulcatisque, minime puberulis, gemma conica puberula. Folia chartacea vel crasse chartacea, cinereo-olivacea, utrinque glabra, oblonga vel oblongo-elliptica, 7.5—9 cm longa, 2.2—3.5 cm lata, apice acuminata, basi obtusa, margine e conspicua leviter serrata, costa supra impressa, subtus elevata, nervis lateralibus ca. 7-jugis, utrinque paulo conspicuis vel e conspicuis, reticulatis parcis, utrinque prominulis; petioli 5—8 mm longi, glabri. Flore ignoti. Infructescentia cymosa, unifructus in ramulo insertus, pedicelli fructuum 1—2 mm longi, minute puberuli. Fructus ematuri globulosi, 3—4 mm diam., calyce persistente 4-lobato, lobis triangulatis obtusis, puberulis ciliatisque, stigma crasse disciformis 4-lobatum, pyrenis ematuris.

Yunnan(云南), Jingdong(景东), alt. 1600 m in sylvis mastis, frutex 1.8—2.5 m altus, Sep. 19, 1940, M. K. Li (李鸣冈) 3350 (Typus! 模式标本! KUN).

本种与平南冬青 (*I. pingnanensis* S. Y. Hu 产于广西) 相似, 但分枝被细小微柔毛, 叶较小, 纸质, 无毛, 侧脉在两面不显著而不同。

铜光冬青 (新种) 图版 4, 3

Ilex cupreonitens C. Y. Wu, sp. nov.

Species affinis *I. subodoratae* S. Y. Hu, sed foliis tenuioribus, nervis reticulatis utrinque conspicuis, apice longe acuminatis, basi obtusis vel subrotundatis, supra cupreo-nitidis, inflorescentiis fasciculatis, pedicellis fructuum brevissimis 1—2 mm longis, fructibus globosis 5 mm diam. stigmate pachydiscoide differt.

Arbor sempervirens, 5—6 m alta, omnino glabra, ramulis glandaceis lenticellatis, gemma terminata conica. Folia coriacea olivacea, supra cupreonitens, oblongo-elliptica 6.5—10 cm longa, 2.5—4 cm lata, apice acuminata, basi obtusa vel subrotundata, margine leviter serrata, costa supra impressa, subtus elevata, nervis lateralibus 8—10-jugis utrinque prominentibus, reticulatis utrinque prominentibus; petioli 10—12 mm longi, supra anguste

profundeque canaliculati, subtus rugosi. Inflorescentia fasciculata. Flores ignoti. Pedicelli fructuum 1—2mm longi. Fructus globosi 5mm diam., in sicco angulati, calyce persistente 4-lobato, lobi subrotundati, stigma pachydiscoides, pyrena 4, elliptica 4mm longa, 3mm lata, dorso striata sulcataque.

Yunnan (云南): Wenshan (文山), Laojunshan (老君山), alt. 1800—2200m in sylvis mixtis, arbor 5.3m alta, Aug. 12, 1947, K. M. Feng (冯国楣) 11147 (Typus! 模式标本! KUN).

本种近微香冬青 (*I. rubodorata* S. Y. Hu), 但叶较薄, 网脉在两面显著, 先端长渐尖, 上面具铜色光泽; 花序簇生, 果柄极短, 长1—2毫米, 果近球形, 直径5毫米, 柱头厚盘形而不同。

细脉冬青 (新种) 图版4, 4

Ilex venosa C. Y. Wu, sp. nov.

Species affinis *I. formosanae* Maxim., sed nervis utrinque elevatis, fructibus ellipticis majoribus, stigmatibus umbilicatis complanatis differt.

Arbor 5m alta; ramulis fulvis vel cinereo-fulvis angulatis canaliculatisque, glabris, lenticellatis; gemma terminata minuta, glabra. Folia chartacea vel crasse chartacea olivacea glabra oblongo-elliptica vel lato-lanceolata, 7—12cm longa, 2.5—4.3cm lata, apice longe acuminata, basi obtusa, margine parce leviter serrata, costa supra impressa, subtus elevata, nervis lateralibus 8—9-jugis, utrinque prominentibus, reticulatis prominentibus; petiolis 8—10mm longis, supra anguste canaliculatis, subtus rugosis. Inflorescentia ignota. Infructescentia pseudo-racemosa, axe brevissime; petioli 1—2mm longi paulo puberuli vel glabri. Fructus elliptici 9mm longi 6mm lati, calyce persistente plano 4-lobato; stigma tenuiter disciformis umbilicatum; pyrena 4, elliptica 6—7mm longa, 3—3.5mm lata, ad dorsum palmate striata sulcataque, lateralem striata sulcataque.

Yunnan (云南): Xinping (新平), Wuqu (五区) erdaoqing (二道箐), alt. 2100m in sylvis, arbor 5m alta, Oct. 22, 1958, S. S. Wu (武素功) 546 (Typus! 模式标本! KUN).

本种与台湾冬青 (*I. formosana* Maxim.) 相似, 但叶脉在两面凸

起，果椭圆形，较大，柱头扁平脐形而不同。

麻栗坡冬青 (新种) 图版 5, 1

Ilex marlipoensis H. W. Li, sp. nov.

species affinis *I. Wattii* Loes., sed foliis oblongo-ellipticis, 8—13cm longis 3.5—4.5cm latis, margine paulo serrulatis, pedicellis fructuum 2—4mm longis, basi bracteolis 2 differt.

Arbor sempervirens, raro frutex 5—15m alta, omnino glabra, ramulis fulvis vel nigro-fulvis, angulatis sulcatisque, glabris, gemma terminata conica. Folia tenuiter coriacea vel coriacea, oblongo-elliptica 8—13cm longa, 3.5—4.5cm lata, margine leviter serrulata, costa supra impressa subtus elevata, nervis lateralibus 8—9-jugis, utrinque prominentibus, reticulatis parce, supra eonspiciuis, subtus prominentibus, petioli 8—10mm longi, supra profunde anguste canaliculati, subtus rugosi. Cymis fasciculatis axillaribus. Flores alabstri, pedicelli 2—4mm longi, ad basem 2 bracteolati ornati. Fructus ematuri, subglobosi 5—6mm longi (3.5—) 4—5mm lati, calyce persistente plano ca. 2mm diam. 4-partito, lobi ovato-triangulati, stigma crasse disceformis 4-lobatum, pyrena 4, ad dorsum et lateralem leviter palmate striata sulcataque.

Yunnan (云南), Malipo (麻栗坡), Laojunshan (老君山), in sylvis frondosis, arbor 15m alta, fructus viridis, Maj. 19, 1962, K. M. Feng (冯国楣) 22664 (Typus: 模式标本! KUN), 13901, 22704, 22282, ibidem (同地), alt. 1350m prope amnes, arbuscula 4m alta, alabastris, Dec. 3, 1962, C. A. Wu (武全安) 171.

本种与假香冬青 (*I. wattii* Loes.) 相似，但叶片长圆状椭圆形，长 8—13 厘米，宽 3.5—5 厘米，边缘稍具细锯齿；果柄长 2—4 毫米，基部具 2 枚小苞片而不同。

珊瑚冬青

Ilex corallina S. Y. Hu

假枝珊瑚冬青 (变种) (新组合) 图版 5, 2

var. *wangiana* (S. Y. Hu) Y. R. Li, comb. nov.

I. wangiana S. Y. Hu in Journ. Arn. Arb. 31: 54, (1950).

A var. *corallina* S. Y. Hu recedit fructibus puberulis vel

glabrescentibus, stigmatibus crasse disciforme vel subcapitato.

Yunnan (云南): Weixi (维西), Lancang Jiang Valle fluviorum (澜沧江河谷), alt. 1850—1950m in declivibus.

与原变种的区别是果被微柔毛或变无毛, 柱头厚盘形至近头形。

景东冬青 (新种) 图版 5, 3

Ilex gintungensis H. W. Li, sp. nov.

Species affinis *I. wattii* Loes., sed floribus masculis majoribus, corollis 10mm diam., staminibus 5—7mm longis, pedicellis fructuum 4—5mm longis differt.

Arbor sempervirens vel frutex, 4—10m alta, omnino glabra, ramulis gracilibus cinereo-fulvis, angulatis sulcatisque, gemma terminata conica, glabra. Folia tantum in annotinis ramulis inserta, crasse chartacea vel tenuiter coriacea, olivacea oblongo-elliptica vel ovato-elliptica, 7—11cm longa 2.5—4cm lata, apice longe acuminata vel caudate acuminata, basi obtusa vel rotundata, margine leviter serrulata, costa supra impressa, subtus elevata, nervis lateralibus 7—10-jugis, supra paulo conspicuis, subtus conspicuis reticulatis subtus conspicuis, petioli glauci, 5—8mm longi. Cyma vel uniflos fasciculata axillaris, flores 4-meri. Flores masculi, pedunculi brevissimi, 1—3-flores in ramulo inserti, pedicelli 2—3mm longi, ad basem 2 bracteolati ornati, corolla 10mm diam., calyce partito, lobo ovato-triangulato 1.5mm longo latoque, petala oblonga 4mm longa, 2.5mm lata, apice rotundata, parce ciliata, basi consociata, stamina 5—7mm longa, anthera ovata, sterila ovaria subglobosa, apice rotundata. Flores feminei, ignoti. pedicelli 4—5mm longi. Fructus ematuri globosi ca. 6mm diam., calyce persistente plano, stigma disciformis lobatum, pyrena 4, ad dorsum et lateralem palmata striata sulcataque.

Yunnan (云南): Jingdong (景东), wuliangshan (无量山), Luoshuidong (落水洞), alt. 1800m viaticis, frutex 4m altus, flos candidus, Mar. 30, 1959, S. G. Xiu (许溯桂) 3478 (Typus! 模式标本! KUN), 3482, Fengqing (凤庆), iongyuesi (琼岳寺), alt. 2450m in sylvis sempervirentibus frondosis, frutex, flos viridis,

Feb. 20, 1963, L. F. Xia (夏丽芳) et Z. H. Yan (杨增宏) 69.

本种与假香冬青 (*I. wattii* Loes.) 近似, 但雄花较大, 花冠直径 10 毫米, 雄蕊长 5—7 毫米, 果柄长 4—5 毫米而不同。

广南冬青 (新种) 图版 5, 4

Ilex guangnanensis Tseng et Y. R. Li, sp. nov.

Species affinis *I. cyrturae* Merr., sed ramulis foliisque glabris, foliis minoribus, nervis lateralibus supra eonspicuis, fructibus majoribus, stigmato crasse disciformi differt.

Arbor 15m alta, omnino glabra, ramulis fulvis angulatis sulcatisque, gemma termita conica, perula ciliata. Folia teruiter coriacea vel coriacea, olivacea, oblonga vel oblongo-elliptica raro elliptico-oblongata, 4—8cm longa (1.3—) 2—2.5cm lata, apice caudate acuminata vel falcata, basi obtusa vel late cuneata, margine undulata conspicue serrata, costa supra impressa, subtus elevata, nervis lateralibus minutis 7—9-jugis, supra eonspicuis, subtus conspicuis, reticulatis tantum subtus conspicuis, petioli graciles, 5—8mm longi. Flores fasciculati, axillares, 4-meri. Flores masculi; pedicelli brevissimi; bracteola longe ovato-triangularata, ciliata vel glabra, calyce partito, lobo triangularato 1mm longo, paululum ciliato, petala oblonga ca 2mm longa 1mm lata, ad basem connata, stamina breviora petalis, anthera late elliptica, sterila ovaria ovato-globosa apice concava. Flores feminei, majores masculis, calyce lobato, lobo triangularato-ovato, ciliato, petala oblonga, 3mm longa, 1.5mm lata, sterila stamina breviora petalis, anthera ovata, ovaria ovato-globosa, ca 2mm diam. stigma elevata 4-lobata. Fructus globosi-ca. 6mm diam., calyce persistente plane quatrato, 2.5—3mm diam., stigma crassa disciformis, pyrena 4, elliptica 4.5mm longa, 2.5mm lata, ad dorsum eonspicue palmate striata sulcataque, ad lateralem glabra vel paulo striata.

Yunnan (云南); Guangnan (广南), alt. 1550m in sylvis. Feb. 29, 1940, C. W. Wang (王启无) 87366, 87530 (fl. mas.), 87669, 88002 (fl. fem.), ibidem (同地), alt. 1150m in sylvis, Nov. 11, 1964, Z. W. Lin (林中文) 627 (Typus! 模式标本! KUN), ibidem,

C. A. Wu (武全安) 9830.

本种与弯尾冬青 (*I. cyrtura* Merr.) 相似, 但分枝及叶无毛, 叶片较小, 侧脉在上面不明显, 果较大, 柱头厚盘形而不同。

昆明冬青 (新种) 图版 6, 1

Ilex kunmingensis H. W. Li, sp. nov.

Species affinis *I. corallinae* Franch., sed foliis obvato-oblongis vel elliptico-oblongatis, apice subito acuminatis, pyrena plana differt.

Frutex 2m altus, omnino glaber, ramulis fulvis vel nigrescentibus fulvis angulatis sulcatisque, gemma terminata parva, ovate conica. Folia crasse chartacea vel coriacea, olivacea vel fulva, obovato-oblonga vel elliptico-oblongata, raro elliptica, 5.5—7.5cm longa, 1.7—2.5cm lata, apice subito acuminata vel longe acuminata, basi late cuneata, margine paulum parce serrata, costa supra impressa, subtus elevata, nervis lateralibus 8—9-jugis, supra paulo conspicuis, subtus conspicuis, reticulatis supra econspicuis, subtus conspicuis, petioli 5—9mm longi, supra anguste canaliculati, subtus rugosi. Flores ignoti. Fructus (ematuri) subglobosi, 4mm diam., pedicelli 2—3mm longi, calyce persistente 4-lobato, lobo ovato, ciliato, stigma crasse disciformis 4-lobatum, pyrena 4, 2mm longa, 1.5mm lata, vix striata sulcataque.

Yunnan (云南): Songming (嵩明), shaodianqu (邵甸区), Guodongxiang (果东乡), alt. 2100—2300m in fruticetis, frutex 2m altus, fructus viridis, Oct. 12, 1953, P. Y. Chiou (邱炳云) 50398 (Typus! 模式标本! KUN), 54881.

本种近似珊瑚冬青 (*I. corallina* Franch.), 但叶片倒卵状长圆形至椭圆状倒披针形, 先端突然渐尖, 分核平滑而不同。

头状昆明冬青 (新变种)

var. *capitata* Y. R. Li, var. nov.

A var. *kunmingensis* recedit laminis majoribus 5—8cm longis 2—3cm latis, pedicellis fructuum longioribus 3.5—8mm longis, parce puberulis, stigmate capitato.

Yunnan (云南): Shuangjiang (双江), Dapingxiang, (大平乡),

alt 2200—2500m in sylvis densis, arbor 4m alta, fructus viridis, Sep. 11, 1957, G. S. Sin (辛景三) 840 (Typus! 模式标本! KUN).

与原变种的区别在于叶片较大, 长5—8厘米, 宽2—3厘米, 果柄较长, 长3.5—5毫米, 疏被微柔毛, 柱头头形。

大柱头冬青 (新种) 图版6, 2

Ilex macrostigma C. Y. Wu, sp. nov.

Species affinis *I. tephrophyllae* (Loes.) S. Y. Hu, sed foliis ellipticis vel oblongo-lanceolatis, apice acuminatis, margine parce leviterque serrulatis, inflorescentiis femineis fasciculatis, pedicellis brevioribus glabris, stigmate crasse conico-capitato differt.

Frutex, omnino glaber, ramulis fulvis, angulatis sulcatisque, gemma terminata conica. Folia teruiter coriacea, olivacea, elliptica vel oblongo-lanceolata, 4.5—8.5cm longa, 1.8—2.5cm lata, apice acuminata vel longe acuminata, basi obtusa vel late cuneata, margine parce leviter serrulata, costa supra impressa, subtus elevata, nervis lateralibus 7—8-jugis, utrinque prominentibus, reticulatis conspicuis, petioli 5—8mm longi, supra canaliculati, subtus rugosi. Inflorescentia mascula ignota. Flores feminei, fasciculati axillares, pedicelli 2—3mm longi, ad basem 2 bracteolati inserti, bracteolis ciliatis, calyce 4-partito, lobis subrotundatis vel late triangulatis, ciliatis, petala staminaque ignota, ovaria ovato-globosa, stigma majorius capitatum. Fructus ignotus.

Yunnan (云南): Heqing (鹤庆), Songsongluhe (松松六合), frutex, Apr. 29, 1939, K. M. Feng (冯国楣) 458 (Typus! 模式标本! KUN)

本种与灰叶冬青 [*I. tephrophylla* (Loes.) S. Y. Hu] 相似, 但叶为椭圆形至长圆状披针形, 先端渐尖, 边缘具疏而浅的细锯齿, 雌花簇生, 花梗较短, 柱头大呈圆锥状头形而不同。

小核冬青 (新种) 图版6, 3

Ilex micropyrena C. Y. Wu, sp. nov.

Species affinis *I. chienianae* S. Y. Hu, sed foliis majoribus longioribusque, laminis oblongo-lanceolatis, apice acuminatis,

infructescentiis pseudoracemosis, pedicellis fructuum 5—7mm longis, pyrenis minoribus 2.5mm longis 2mm latis differt.

Frutex 2.5m altus, ramulis fulvis, angulatis sulcatisque, gemma terminata conica, glabra, margine perulae denticulata. Folia tenuiter coreacea olivacea, utrinque glabra, oblongo-lanceolata, raro oblongo-elliptica 8—12cm longa, 2.5—4.2cm lata, apice acuminata, basi obtusa vel late cuneata, margine leviter serrulata, costa supra impressa, subtus elevata, nervis lateralibus 9—10-jugis utrinque conspicuis, reticulatis parce, supra econspicuis, subtus conspicuis, petioli 8—12mm longi, supra anguste canaliculati, subtus rugosi, glabri. Inflorescentia ignota. Infructescentia pseudoracemosa axillaris, axe glabro; pedicelli fructuum 5—7mm longi, puberuli vel glabri, infra medium 2 bracteolati, glabri. Fructus globosi 5mm diam., stigma tenuiter disciformis leviter 4-lobatum, pyrena 4, late elliptica 2.5mm longa, 2mm lata, ad dorsum palmate striata sulcataque, ad lateralem rugosa.

Yunnan (云南), Gongshan (贡山), Changputung (菖蒲桶), alt. 1700m in sylvis, Sep. 28, 1940, K. M. Feng 8070 (Typus! 模式标本! KUN).

本种近似 *I. shieniana* S. Y. Hu, 但叶较大而长, 叶片长圆状披针形, 先端渐尖; 果序为假总状, 果柄长 5—7 毫米, 分核较小, 长 2.5 毫米, 宽 2 毫米而不同。

点叶冬青 (新种) 图版 6, 4

Ilex punctatilimba C. Y. Wu, sp. nov.

Species affinis *I. peiradenae* S. Y. Hu ex Guangxi, sed foliis subtus punctato-glandulosis, oblongo-lanceolatis ad 3cm latis, petiolis longioribus, ramulis purpureo-nigris, inflorescentiis masculis pseudo-paniculatis, pedunculis valde grossis differt.

Arbor parva sempervirens vel frutex 3—5m alta, ramulis grossis, purpureo-nigris, angulatis glabris, gemma terminata conica. Folia coriacea, in sicco viride fulva, glabra, subtus punctato-glandulosa, oblongo-lanceolata 8—10cm longa, 2.5—3 (—3.2) cm lata, apice acuminata, basi subrotundata vel obtusa,

marginē econspicue serrata, costā supra impressa, subtus elevata, nervis lateralibus 10—12 (—14) -jugis, supra econspicuis, subtus conspicuis, reticulatis subtus paulo conspicuis, petioli grossi, purpureo-rubri vel purpureo-nigri, 1.2—1.5cm longi, supra canaliculati, subtus teretiusculi glabri. Flores masculi, umbellati, axillares, pedunculi grossissimi, bractea bracteolaeque parva, ovata ciliata, flores flavovirentes, 4-meri, calyce lobato, lobi triangulato-ovati, ciliati, petala elliptica, 2mm longa ca. 1.5mm lata, ciliata, ad basem connexa, stamina 1.5mm longa, sterila ovaria subglobosa, apice lobata. Flores feminei et fructus ignoti.

Yunnan (云南), Jingdong (景东), Wuliangshan (无量山), alt. 2500m in sylvis, megafrutex 5m altus, Maj. 1, 1959, S. G. Xiu (许溯桂) 4780 (Typus! 模式标本! KUN).

本种近似 *I. peiradena* S. Y. Hu, 产广西, 但叶片长圆状披针形, 宽3厘米, 背面具腺点, 叶柄较长, 分枝紫黑色, 雄花呈伞形花序, 总花梗极粗壮而不同。

假刺齿冬青组 Sect. *Pseudoaquifolie* S. Y. Hu

灌木或乔木。叶全缘, 稀具齿状锯齿。花序簇生; 花6—8数(稀4数)。果具分核6—8, 稀4; 分核具棱而无沟, 稀有沟, 内果皮革质, 稀木质。

内果皮木质, 分核背面具3棱和2沟, 棱与内果皮粘合; 小枝纤细, 具棱(纤枝冬青系 *Ser. peinfo liae*)。

乳头冬青 (新种) 图版7, 1

Ilex mamillata C. Y. Wu, sp. nov.

Species affinis *I. cochinchinensi* (Loes.) Loes., sed foliis minoribus 4—8cm longis, integris vel ad apicem parciserratis; fructibus 3—8mm longis, calyce persistente 6-lobato, lobis late deltoideis, apice acutis, stylis mammiformibus differt.

Arbor 12m alta, ramulis canis, junioribus angulatis sulcatisque, ceteris scabrosis, paulo puberulis vel glabris, gemma terminata puberula. Folia coriacea, olivacea, supra nitida,

oblongo-elliptica, raro elliptica vel lanceolato-elliptica, 4—8cm longa, 1.3—3.2cm lata, apice acuminata vel breviter acuminata, basi obtusa vel late cuneata, integra vel ad apicem parce conspicue serrata, costa supra impressa, minime puberula, subtus elevata, nervis lateralibus 9—10-jugis, utrinque paulo conspicuis, reticulatis eonspiciuis, petioli 5—8mm longi, supra anguste canaliculati intra puberuli, subtus rugosi, glabri. Flores ignoti. Fructus 1—4 fasciculati axillares, pedicelli fructuum 3—8mm longi, puberuli, ad basem fasciculati squamosi, puberuli ciliatique. Fructus subglobosus 5—6.5mm diam., calyce persistente 6-lobato, lobo late triangulato, acuto vel obtuso ciliato, stigma capitatum insigniter elevatum, pyrena 6, elliptica 3—4mm longa, 1.5—2mm lata, ad dorsum 3-striata et 2-sulcata, ad lateralem striata.

Yunnan (云南): Yanshan (砚山), alt. 1200m in sylvis, Oct. 14, 1939, C. W. Wang (王启无) 84381 (Typus! 模式标本! KUN); Guangnan (广南), alt. 1300m in sylvis, Oct. 3, 1965, Sect. Wenshan (文山组) 035; Fumin (富民), alt. 2200m in sylvis, P. Y. Chiou (邱炳云) 50257; Yanbi (漾濞), Oct. 24, 1940, R. C. Ching (秦仁昌) 25197.

本种与越南冬青 [*I. cochinchensis* (Loes.) Loes.] 相似, 但叶片较小, 长4—8厘米, 全缘或在先端具极小的锯齿; 果柄长3—8毫米, 宿存萼6裂, 裂片阔三角形, 顶端急尖, 柱头乳头状而不同。

叶全缘, 先端通常尾尖; 分核4, 稀5 (长尾冬青系 *Ser. Longicaudatae*)。

拟长尾冬青 (新种) 图版7, 2

Ilex sublongicaudata C. J. Tseng et S. Liu, sp. nov.

Species affinis *I. longicaudatae* Comber, sed foliis subtus epunctatis, costis supra planis vel paulo convexis, apice brevior acuminatis differt.

Frutex (?), 2m altus; ramulis testaceis vel cinereis, juvenibus angulatis sulcatisque, puberulis, veteribus teretibus; gemma

terminata parva, anguste conica, dense minime puberula. Folia coriacea, olivacea, supra praeter costam puberula, cetero glabra, subtus epunctata glabraque, elliptica vel oblongo-elliptica 4—6cm longa, 1.5—2.2cm lata integra, apice longe acuminata, acumina 5—10mm longa, base obtusa, costa supra plana vel prominula, subtus elevata, nervis lateralibus 7—9-jugis, supra eonspicuis, subtus haulo conspicuis, reticulatis utrinque eonspicuis, petioli 4—6mm longi, supra late canaliculati puberuli, subtus glabri rugosi. Flores ignoti. Fructus ad annotinum ramulum axillari, fructus 1—3 fasciculatus, pedicelli 2.5—4.5mm longi, quadrangulati glabri, fructus globosus, 3.5—4mm diam., calyce persistente plane disciformi, 4—5-partito, lobo late triangulato, ciliato, stigma crasse disciformis, leviter lobatum, pyrena 4—5, oblongo-elliptica, 3.5mm longa, 1.5mm lata, ad dorsum leviter 3—4-striata sulcataque vel esulcata.

Yunnan (云南): Longling (龙陵) alt. 2600m in sylvis clivorum, Aug. 28, 1941, C. W. Wang (王启无) 90264 (Typus: 模式标本! KUN).

本种近似长尾冬青 (*I. longecaudata* Comber), 但叶背无点, 中脉在上面平或微凸, 先端为较短的渐尖而不同。

叶具锯轮、细圆齿或近全缘; 分核6或7 (小果冬青系 *Ser. Microdontae*)。

茎花冬青 (新种) 图版7, 3

Ilex canliflora H. W. Li, sp. nov.

Species characteribus infructescentiis in axillis foliorum cicatricatorum ramulis biennibus; fructibus parvis, fasciculatis, stigmate capicato; foliis elliptico-lanceolatis, margine serrulatis, petiolis longis.

Frutex sempervirens, 5m altus, ramulis grossis, annuis biennibusque nigro-fulvis, angulatis sulcatisque, glabris, trimis cinereis, lenticellis magnis, orbiculatis, leviter elevatis, gemma terminata longe conica, perula margine ciliata. Folia tenuiter

coriacea vel chartacea, in sicco fulva vel fulvo-olivacea, elliptico-lanceolata vel oblongo-elliptica, 6—9.5cm longa, 2.5—4cm lata, apice abrupte acuminata vel longe acuminata, basi obtusa vel subrotundata, margine serrulata, costa supra plana vel leviter concava, subtus plana vel leviter elevata, nervis lateralibus ca. 8-jugis, utrinque conspicuis, reticulatis supra econspicuis, subtus conspicuis, petioli 1—1.2cm longi grossi, glabri, rugosi. Flores ignoti. Fructescentia umbellata, tantum ad bienies ramulos foliolicatricatorum axillaris, pedunculi 1mm longi, grossi glabri, pedicelli fructuum 3—4mm longi, glabri, fructus 5—10, globosi, ca. 3mm diam., calyce persistente plane disciformi, ca. 2mm diam., 4-partiti, lobis triangulato-semiorbiculatis, stigma crasse disciformis vel capitatum, leviter 4-lobatum, pyrena 4, elliptica, ad dorsum 4—5-striata esulcata.

Yunnan (云南): Malipo (麻栗坡), Laojunshan (老君山), alt. 2000—2600m in fruticetis, Feb. 26, 1962, K. M. Feng (冯国楣) 22911 (Typus! 模式标本! KUN).

本种特征在于果序全部着生于二年生枝的叶痕内; 果小, 簇生, 柱头头形; 叶片椭圆状披针形, 边缘具细锯齿, 叶柄长 1—2.2 厘米。

果柄长 1—3 毫米, 较果柄为短; 果常常成对 (微缺冬青系 *Ser. Hanceanae*)。

双齿冬青 (新种) 图版 7, 4

Ilex bidens C. Y. Wu, sp. nov.

Species affinis *I. champicnii* Loes., sed foliis coriaceis, apice truncatis vel emarginatis, in centro acuminibus triangulatis, costis elongatis confictis, utroque latere 1 (-2) denticulatis, ramulis dense puberulis differt.

Arbor, 5m alta, ramulis cinereis, subteretibus, juvenibus angulatis sulcatisque, dense puberulis, foliolicatricati semiorbiculati, perelevati, gemma parva conica puberula. Folia coriacea, olivacea vel cinereo-viridia, obovata 1.5—2.8cm longa,

1—1.5cm lata, apice truncata vel emarginata in centro acumina-
triangulata costa elongata conficta, utroque latere 1 (-2) den-
ticulata, basi obtusa, praeter apicem denticulata, ceter inte-
gra, costa supra elevata, dense puberula, subtus plana, glabra,
nervis lateralibus ca. 5-jugis, supra econspicuis, subtus paulo
conspicuis vel econspicuis, reticulatis utrinque econspicuis, pe-
tioli 2—4mm longi, puberuli, Cyma vel uniflos fasciculata ad
annuos biennesque ramulos axillaris, pedicelli 2—3.5mm longi,
quadrangulati, parce puberuli vel glabri, ad basem 2 bracteo-
lati, bracteola parva, ovato-triangulata, parce puberula. Flo-
res 1—3, perparvi, ematuri, calyce 5-lobato, lobis triangulatis,
parce puberulis ciliatisque, petala ignota.

Yunnan (云南): Jinping (金平), Yongping Xiang (永平乡)
alt. 2450m in dense sylvis, arbor 15m alta, Dec. 12, 1958, H.
W. Li (李锡文) 465 (Typus! 模式标本! KUN).

本种近似 *I. championii* Loes., 但叶片革质, 先端平截或内凹, 中
央具由中脉延伸形成三角形小尖突, 两侧各具 1 (-2) 小齿, 小枝密被微
柔毛而不同。

矮杨梅冬青 (新种) 图版 8, 1

Ilex chamaebuxus C. Y. Wu, sp. nov.

Species affinis *I. championii* Loes., sed foliis minoribus, sub-
tus epunctatis, ramulis dense puberulis differt.

Arbor parva 3m alta, ramulis cinereo-fulvis, angulatis
sulcatisque, dense puberulis, gemma terminata parva, co-
nica, puberula. Folia parva, crasse coriacea, in sicco fulvo-
olivacea, subtus fulva, epunctata obovata 12—18mm longa 6—
12mm lata, apice cordata, base obtusa vel late cuneata, inte-
gra, costa supra impressa, puberula, subtus paulo elevata gla-
bra, nervis lateralibus utrinque econspicuis, petioli 2—4mm
longi, supra canaliculati puberuli, subtus glabri. Flores masculi,
cyma fasciculata vel singulare vel dichotoma, pedunculi 2—3mm
longi, puberuli, pedicelli 0.5—1.5mm longi puberuli, ad basem
bracteolati, flores albi, calyce 4 (-5) -partito, lobis late ova-
tis, puberulis ciliatis, petala 4, elliptica 2mm longa, 1—1.5mm

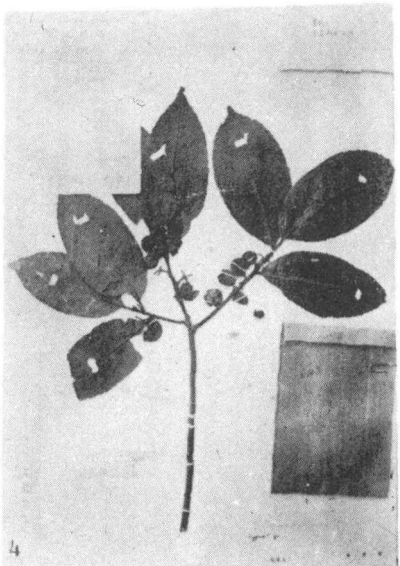
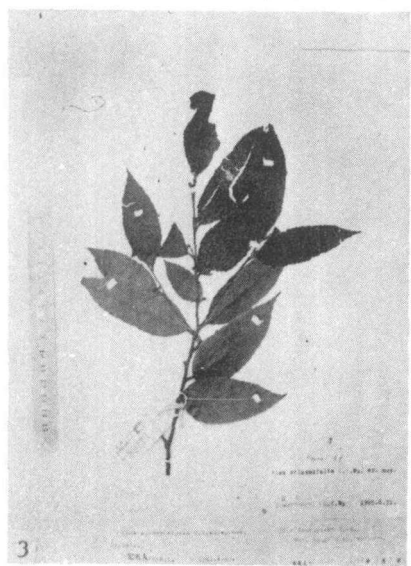
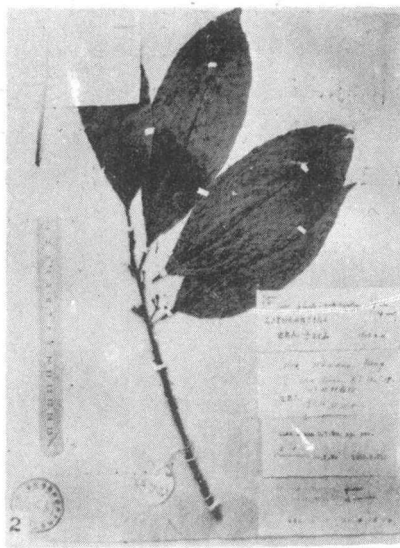
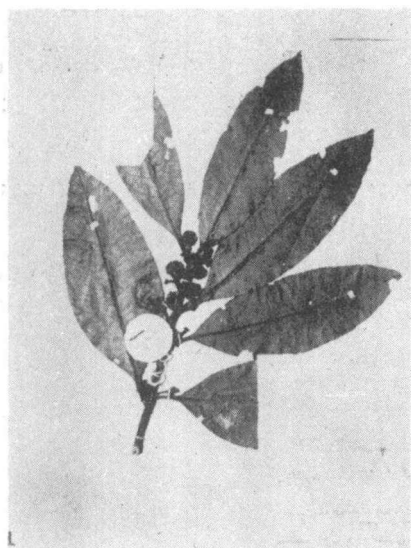
lata, stamina 4, breviora petalis, antherae ellipticae, sterila ovaria globosa, apice plana, stigmata parve disciforma. Flore feminei et fructus ignoti.

Yunnan (云南); Xichou (西畴), Nanchangunshe (南昌公社), Xiaojiatanzi (肖家圪子), in sylvis, arbor 3m alta, Maj. 7, 1959, C. A. Wu (武全安) 7933 (Typus! 模式标本! KUN), Malipo (麻栗坡), Huanjinyin (黄金印), alt. 1100m in fissuris saxatilibus, Jun. 22, 1940, C. W. Wang (王启无) 86353.

本种与 *I. championii* Loes. 相似, 但叶较小, 背面无点, 分枝密被微柔毛而不同。

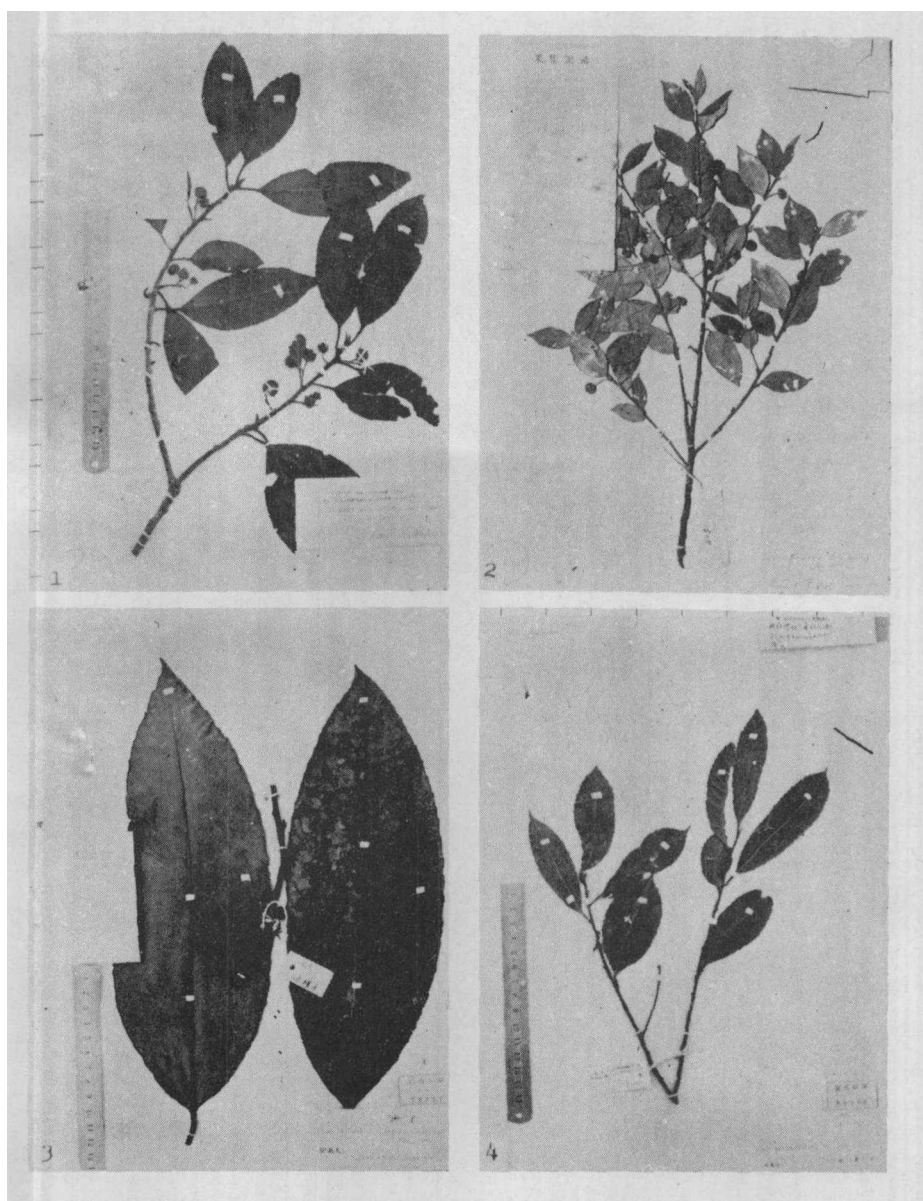
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图版 1



1. 楠叶冬青 *Ilex machilifolia* H. W. Li, sp. nov.
2. 假楠叶冬青 *Ilex paeudomachilifolia* C. Y. Wu, sp. nov.
3. 柞叶冬青 *Ilex xylosmaefolia* C. Y. Wu, sp. nov.
4. 密花冬青 *Ilex concesta* H. W. Li, sp. nov.

图版 2



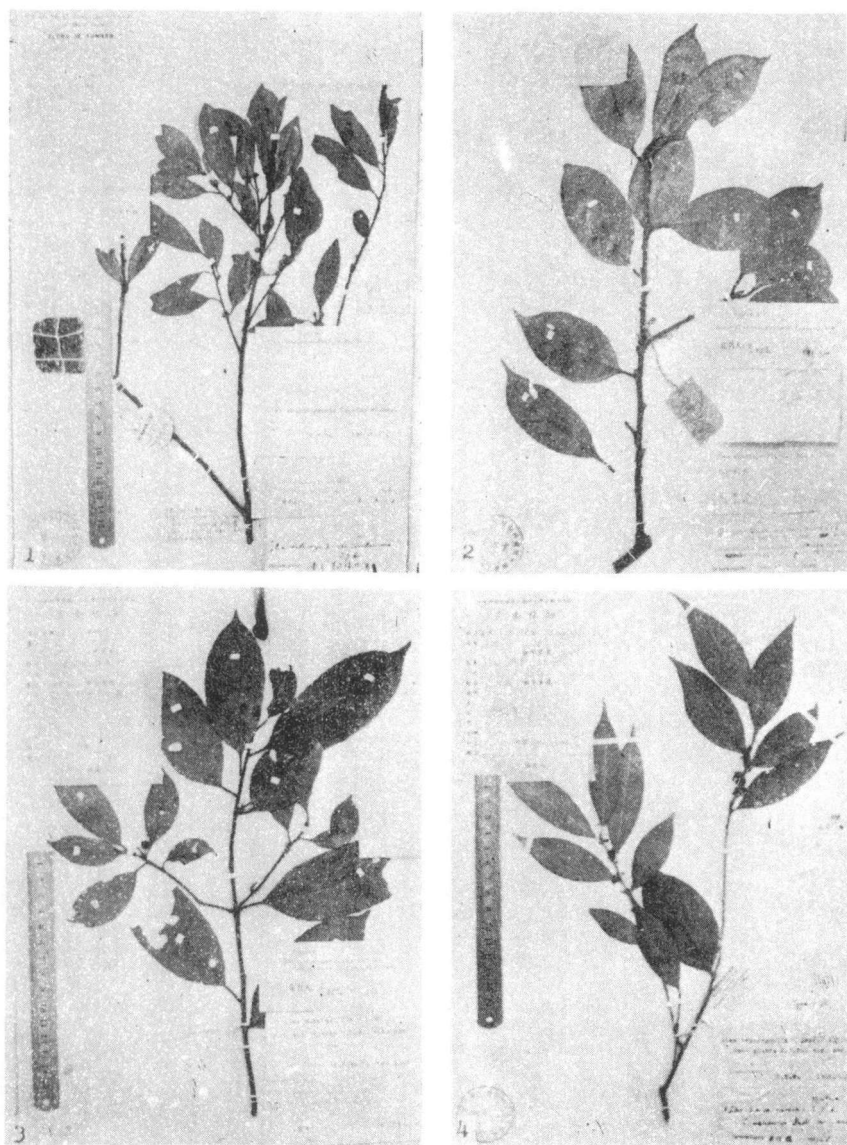
1. 有毛冬青 *Ilex purpurea* Hassk. var. *pubigera* C. Y. Wu, var. nov.

2. 鲁甸冬青 *Ilex ludianensis* S. C. Huang, sp. nov.

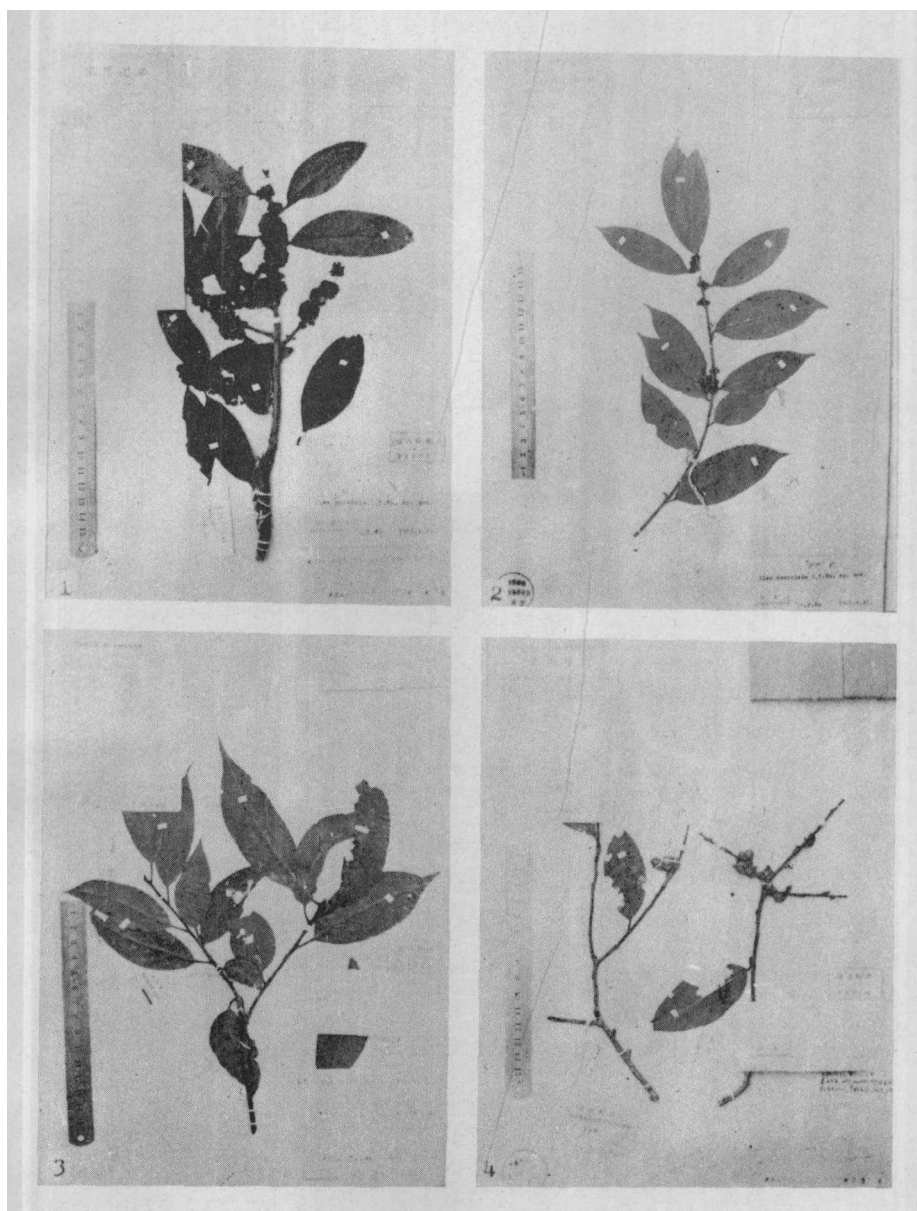
3. 巨叶冬青 *Ilex perlata* C. Chen et S. C. Huang, sp. nov.

4. 毛果冬青 *Ilex trichocarpa* H. W. Li, sp. nov.

图版 3

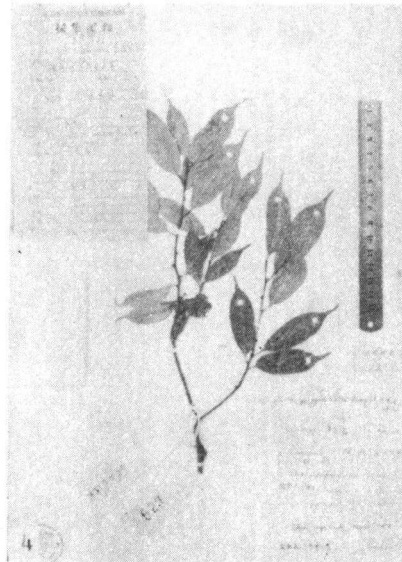
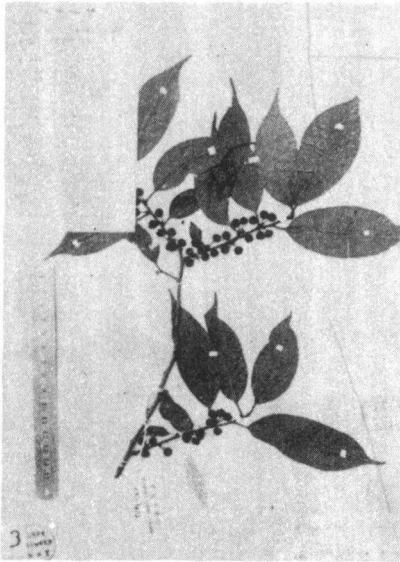
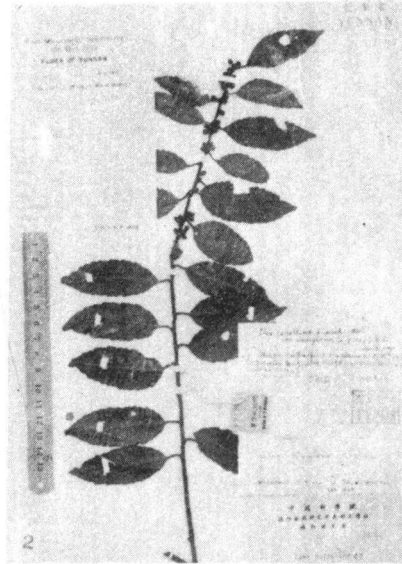
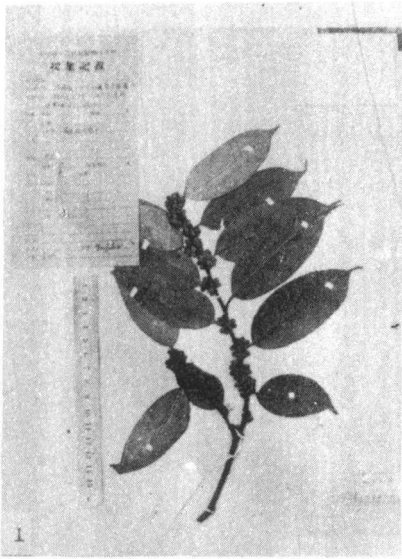


1. 凤庆冬青 *Ilex fengqingensis* C. Y. Wu, sp. nov.
2. 纸叶冬青 *Ilex chartacifolia* C. Y. Wu, sp. nov.
3. 无毛纸叶冬青 *Ilex chartacifolia* var. *glabra* C. Y. Wu, var. nov.
4. 无毛灰叶冬青 *Ilex tephrophyall* (Loes.) S. Y. Hu var. *glabra* C. X. Wu, var. nov.



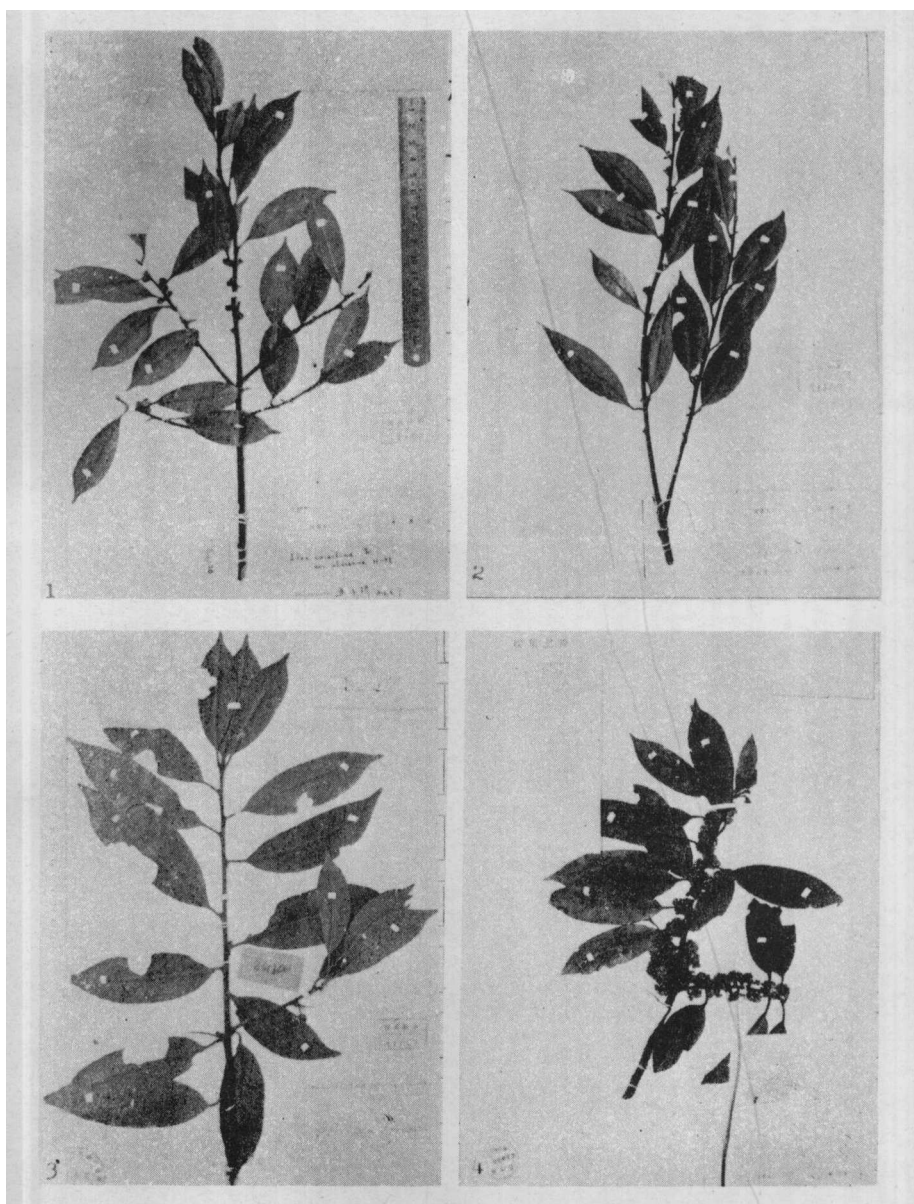
1. 云中冬青 *Ilex nubicola* C. Y. Wu, sp. nov.
2. 毛枝冬青 *Ilex dasyclada* C. Y. Wu, sp. nov.
3. 铜光冬青 *Ilex cupreonitens* C. Y. Wu, sp. nov.
4. 细脉冬青 *Ilex venosa* C. Y. Wu, sp. nov.

图版 5



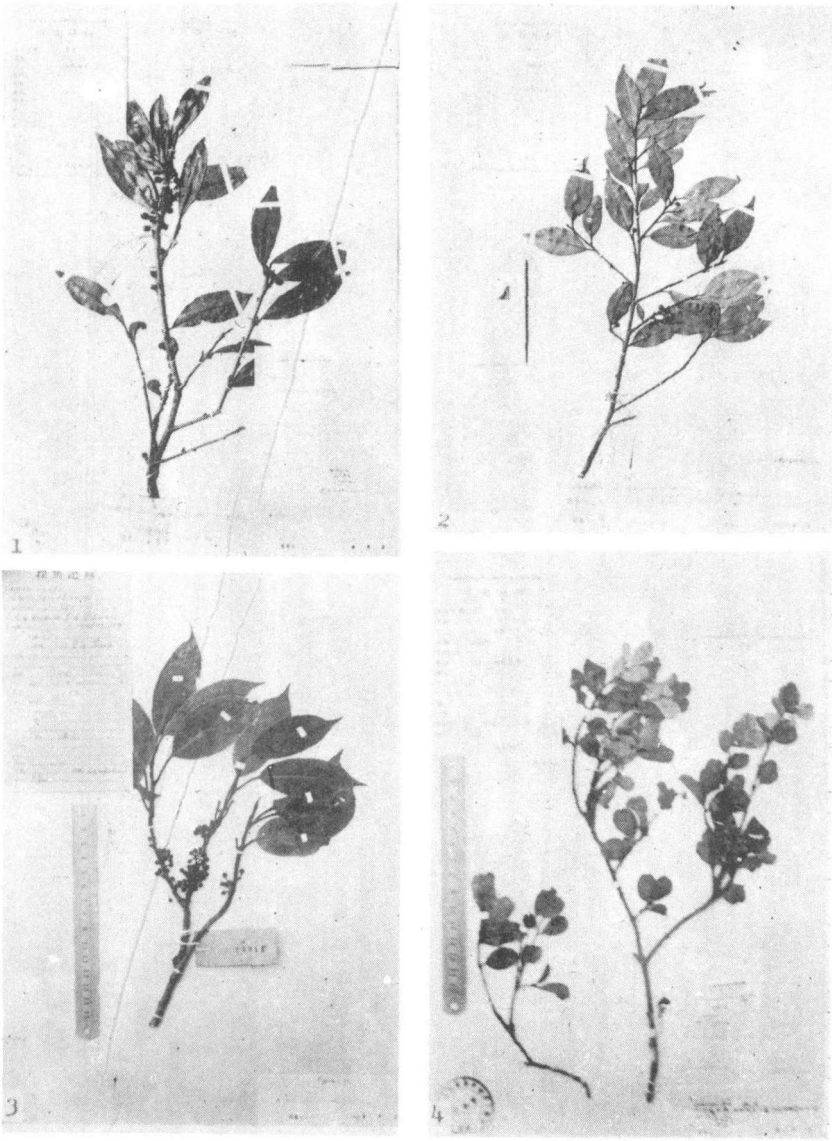
1. 麻栗冬青 *Ilex marlipoesis* H. W. Li, sp. nov.
2. 假枝珊瑚冬青景东冬青 *Ilex corallina* S. Y. Hu var. *wangiana* (S. Y. Hu) Y. R. Li, comb. nov.
3. 景东冬青 *Ilex gintungensis* H. W. Li, sp. nov.
4. 广南冬青 *Ilex quangnanensis* Tseng et Y. R. Li, sp. nov.

图版 6



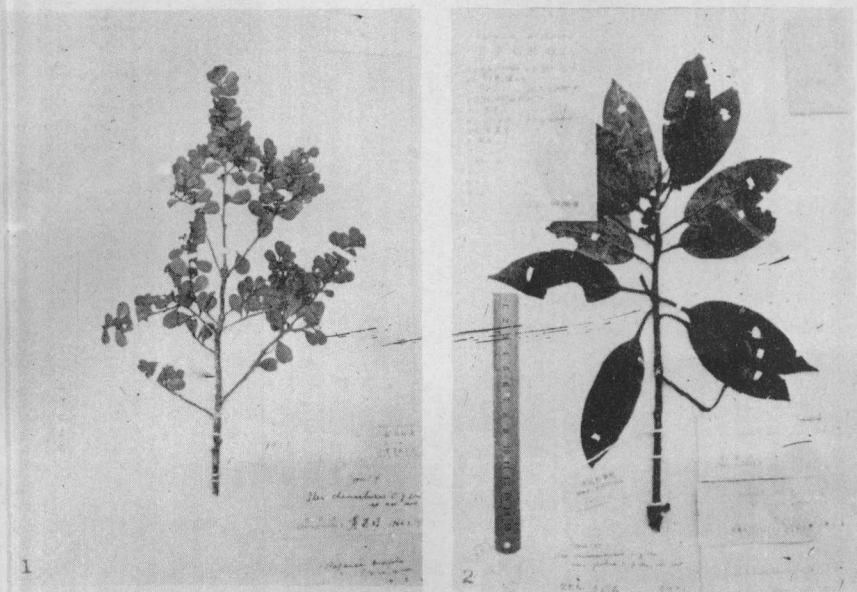
1. 昆明冬青 *Ilex kunmingensis* H. W. Li, sp. nov.
2. 大柱头冬青 *Ilex macrostigma* C. Y. Wu, sp. nov.
3. 小核冬青 *Ilex micropyrena* C. Y. Wu, sp. nov.
4. 点叶冬青 *Ilex punctatilimba* C. Y. Wu, sp. nov.

图版 7



1. 乳头冬青 *Ilex mamillata* C. Y. Wu, sp. nov.
2. 拟长尾冬青 *Ilex sublongicaudata* C. J. Tseng et S. S. Liu, sp. nov.
3. 茎花冬青 *Ilex cauliflora* H. W. Li, sp. nov.
4. 双齿冬青 *Ilex bidens* C. Y. Wu, sp. nov.

图版 8



1. 矮杨梅冬青 *Ilex chamaebuxus* C. Y. Wu, sp. nov.
2. 光叶红河冬青 *Ilex manneiensis* S. Y. Hu var. *glabra* C. Y. Wu, var. nov.